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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,102	02/20/2004	Vidyadhar Sitaram Kale	0025-013	6911
40972 7590 03/17/2009 HENNEMAN & ASSOCIATES, PLC 714 W. MICHIGAN AVENUE THREE RIVERS, MI 49093				
EXAMINER				
DURNFORD GESZVAIN, DELOON				
ART UNIT		PAPER NUMBER		
2622				
MAIL DATE		DELIVERY MODE		
03/17/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/784,102

Applicant(s)

KALE ET AL.

Examiner

Dillon Durnford-Geszvain

Art Unit

2622

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/27/2009 has been entered.

Response to Amendment

2. Claims **1-5** and **7-70** are pending, claims **1, 3, 4, 8, 9, 10, 14, 17, 21, 24, 25, 27, 36, 39** and **46-48** are amended, claims **49-70** are newly added, and claim **6** is cancelled.

Response to Arguments

3. Applicant's arguments with respect to claims **1-5** and **7-70** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims **4, 25, 36, 51, 55, 59, 62, 64, 65 and 69** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
3. Claims **4, 25, 36, 55, 64 and 69** all contain the limitation that the spacer is molded, and the spacer is either the protective cover (claims 4, 25, 36, 55 and 69), or that the spacer is made from a clear material and is located over a portion of the sensor array (claim 64).

There are two different interpretations for this language because there are two spacers mentioned in the specification. There is the spacer that is part of the molding 26 and is described in the amended specification on page 5, and in Fig. 1. But there is also the spacer made of clear plastic or glass that occupies the space (labeled 30) between the lens and the chip in fig. 1 and discussed on p. 10.

If the claims are referring to the spacer on p. 5 the claims contain new matter because that spacer cannot be the protective cover because it does not extend over the imaging array. There is also no support for the spacer of p. 5 to be made from a clear material.

If the claims are referring to the spacer of p. 10 the claims contain new matter because the spacer of claim 10 is not described as being molded in any way. Although it would be possible to use a piece of glass or plastic that has been molded, the specification does not explicitly state that the piece of glass or plastic is of the molded

variety. There is also not inherent support for the molded limitation regarding the spacer of p. 10 because there are other ways of making shaped glass or plastic. There is also not implicit support for the molded limitation regarding the spacer of p. 10 because one of ordinary skill in the art would not think that molding the spacer would clearly be the best choice for shaping the spacer.

4. Claims **51, 59, 62 and 65** all contain the limitation that the protective cover is retained by the spacer on the camera integrated circuit chip. The limitation lacks support in the specification.

If the spacer is the spacer of p. 5 there is no support in the specification for the spacer even touching the protective cover 33 (Fig. 1), let alone resting on top of the protective cover. If the spacer is the spacer of p. 10, there is no support for the protective cover being a separate thing from the spacer. (p. 10 ll. 14-15). If the glass spacer is inserted between the lens and the chip, the protective cover is eliminated.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. **As to claims 1, 9, 17, 27 and 39, the claims are vague and indefinite because it is not entirely clear which spacer the claims are referring to.**

If one were to look at the newly amended specification there are two separate

references to a spacer. There is a spacer as described in paragraph [0052] of the pre-grant publication (p. 10 ll. 9-15 of the spec. as originally filed). That spacer is described as being made of "a clear plastic, glass, or some other optically acceptable material." There is no discussion of how this spacer would be made.

The other discussion of a spacer can be found in the newly amended section of the specification that would be located in paragraph [0032] of the pre-grant publication (p. 5 starting at l. 14 of the specification as filed). There appears to be support in the drawings for making this modification to the specification. This spacer is part of the molding 26 as seen in fig. 1. As far as the Examiner is aware, there is no discussion of what material the molding 26 is to be made of, or what the optical properties of the molding should be.

This amended to the specification is generally confusing and serves to complicate interpretation of the claim language. In each instance where the word spacer is used in the claims there is ambiguity as to which spacer is being referred to.

In claims **1, 9, 17, 27** and **39** the term spacer is vague and indefinite because it is unclear what the metes and bounds of the claim are. In Remarks filed 2/27/2009 the Applicant alleges that support for the amendment to these claims can be found in both sections reciting the spacer, making it clear that the Applicant believes that the language in the claim covers both spacers in the specification. Therefore, because it is unclear whether the claims are drawn to a spacer in the space 33 in fig. 1, or if the spacer is the projection of the molding 26, the claim is vague and indefinite.

The remaining pending claims depend from one of the claims rejected above and

therefore are rejected as being vague and indefinite for at least the reasons given above.

8. As to claims 4, 25, 36 and 55, the claims are vague and indefinite because the claim seems to mix the two spacers from the specification when they are not capable of being mixed.

The above claims all contain some variation of the language of claim 4 where the spacer is the protective cover (spacer from p. 10) and the spacer is a molded spacer (spacer from p. 5). As noted above in the rejection of the claims under 112 first paragraph, there is no support in the specification for the spacer of p. 10 being molded. While it is possible that a glass or plastic spacer could be molded, the context of the specification and the claims would lead one of ordinary skill in the art to believe that the molded spacer is supposed to be the spacer of p. 5. Therefore, because it is unclear which spacer the claim refers to, or if it mixes the spacers together, the claims are vague and indefinite.

9. As to claims 21, 49, 53, 57, 58, 60, 63 and 65-67, the claims are vague and indefinite because the spacer is claimed as being within the recess formed by the molding and part of the molding.

The above claims all contain some variation of the limitation from claim 49 that the spacer is part of the molding. The claims all depend from an independent claim that puts the spacer within the recess included in the molding as in claim 1. It is very confusing how a spacer could be within a recess formed by and molding, and also be a

part of the molding that forms said recess. For a thing to be in a recess formed by a second thing it doesn't seem like it can be part of that second thing.

10. Due to the confusion that the amendment to the specification and the claims caused, examination on the merits of the claims is precluded as it is completely unclear what the Applicant regards as their invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dillon Durnford-Geszvain whose telephone number is (571)272-2829. The examiner can normally be reached on Monday through Friday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DDG

3/12/2009

/David L. Ometz/
Supervisory Patent Examiner, Art Unit 2622